

# MANUFACTURING EXTENSION PARTNERSHIP

## Success Stories from the Field

### Hagel Metal Fabrication Inc.

Illinois Manufacturing Extension Center

#### Cost Containment Strategy Keeps Hagel Metal Fabricators Growing In Tough Times

##### Client Profile:

Hagel Metal Fabricators is a sheet metal fabricator that manufactures products such as enclosures, doors, and brackets for the construction equipment and transportation industries. The company also makes specialized cabinets for the power generations industry. Located in East Peoria, Illinois, Hagel Metal Fabricators employs less than 100 people.

##### Situation:

Hagel Metal Fabrication has seen its business grow substantially over the last three years, contrary to industry trends. Three years ago, Hagel's leadership team made a strategic decision to implement cost containment measures, improve production cycles, and put itself in a position to compete for price-point driven original equipment manufacturer (OEM) business while pursuing opportunities in other markets. The company's relationship with the Prairie State 2000 Authority led to a referral to the Illinois Manufacturing Extension Center (IMEC), a NIST MEP network affiliate. Hagel asked IMEC for help implementing its strategy.

##### Solution:

IMEC's assistance focused on several key areas, including the reduction of set-up and change-over times on Hagel's key processes, implementing a quality management system, and aggressive diversification of its customer base.

Hagel Metal Fabrication runs a four stage manufacturing process that integrates lights-out laser cutting (running 24-7), bending and forming of flat steel, welding/spot welding, and in-house powder coat painting and finishing. In most facilities, set-up times for the press brake operations can take up to 45 minutes. IMEC recommended the company use 10-axis CNC controlled press brakes, which allows the company to use simple, standard tooling to make complex bends. Utilizing lean techniques, IMEC helped Hagel develop a process, document the process, and incorporate it into the manufacturing resource planning (MRP) system. Now, operators simply download the correct set-up procedures on the shop floor. As a result, set-up times on the press brake operations now run 10 to 15 minutes. Through the implementation of lean principles introduced by IMEC, set-ups have also been substantially reduced on the powder coat line.

In addition to leading Hagel's lean activities, IMEC is helping the company further contain costs by developing and implementing a documented quality system that will conform to the QS 9000 standard. Hagel is pursuing the quality registration as part of its growth strategy to not only retain business from its primary customer, but also use it as a sales tool to acquire new business outside the construction equipment industry.

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### **Results:**

Retained competitive pricing through cost containment strategy and productivity gains.

Reduced set-up times on press brake operations from 45 minutes to 10 minutes.

Increased sales volume from major OEM customers.

Secured new contracts with Winnebago and Fun Industries.

Pursuing QS 9000 quality certification.

Pursuing new customer markets.

### **Testimonial:**

It isn't our intent to replace our major customer, but rather grow their business while decreasing their percentage of our overall sales. The quality of the Illinois Manufacturing Extension Center's assistance is on par with that of the larger consulting companies at costs that are well within our reach.

Dave Wrigley, Operations Manager